

MARKETING PRACTICES OF SHEEP
PRODUCTS IN A DECLINING INDUSTRY
(12 OHIO COUNTIES)

E. Dean Baldwin

ESS 565

INTRODUCTION

Sheep production in Southeastern Ohio has been a prosperous enterprise, historically, because of the topography, firm size, favorable wool prices, and the farmer's managerial ability. During the last several decades, changes in economic and sociological relationships have reduced the sheep population within the region. This downward trend in sheep numbers is consistent with production trends for most regions in the United States (2, page 4).

The demise of many sheep enterprises in this area occurred while sheep production in the United States was concentrating in states west of the Mississippi River (2, page 2). In addition, wool prices became more erratic and less favorable as synthetics were introduced. Markets for lamb and mutton appeared to be inadequate and prices were low. Breeding stock was in limited supply and the educational effort was ineffective; thus producers were unable or were unwilling to shift from fine wool breeds to the better muscled meat breeds. Death losses from dogs were high, and the cost of fencing hill fields was expensive.

Although sheep numbers in Southeastern Ohio are at a record low, members of the sheep industry believe that the declining production trend is reversible. This optimism is based on several observations. The topography continues to be well-suited for sheep production, and reclaimed strip mining land in the area offers more available acreage for sheep production. New management techniques reduce production costs, new markets are being introduced and ^{1/} lamb and wool prices are increasing.

^{1/} The following has been instituted: Belmont Joint Vocational School Adult Sheep Program, Ram Test Station at Eastern Ohio Research and Development Center, and a lamb teleauction.

Increased in price improved the profitability of the sheep enterprises relative to competitive or alternative enterprises (2, 3).

Since higher prices imply increased profits for the well-managed sheep enterprise, established producers should expand existing flocks and new firms should enter the industry. The decreases in sheep numbers suggest lamb and wool marketing systems may not be transmitting higher price signals to producers or producers may not be heeding the price signals. Results from previous production research projects imply that expansion in the sheep industry is limited by the existing marketing system and marketing decisions of producers (3, pp. 3-9).

Objectives

To identify the marketing alternatives and practices of lamb and wool producers in Southeastern Ohio, a marketing survey was undertaken in 1974-75. The specific objectives include:

1. A description of the marketing practices and options of lamb and wool producers in Southeastern Ohio.
2. A descriptive analysis of the marketing practices, options, and decisions which inhibit expansion in the sheep industry.
3. The identification of future expansion plans for existing lamb and wool producers.

The results reported in the remainder of this paper should prove helpful to farmers, extension personnel and other educators as they strive to reverse the sheep production trends and to increase the sheep population in Southeastern Ohio.

Procedures

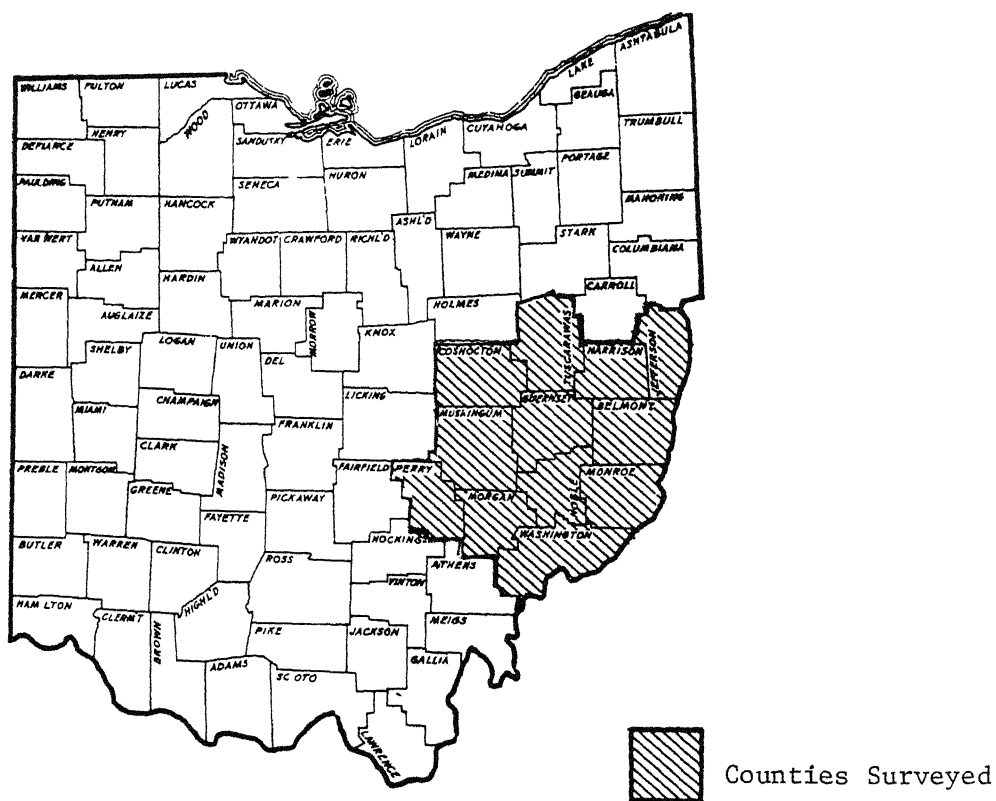
The marketing patterns of sheep producers were surveyed in twelve Southeastern Ohio counties (Figure 1). These counties have a competitive advantage in sheep production and produced 74 percent of all sheep in Southeastern Ohio in 1974 (4). Results from this survey reflect the marketing patterns and habits of Southeastern producers.

Prior to the survey (1973), names of 1466 sheep producers were identified in this twelve county area. Comparable data from the Statistical Reporting Service and Bureau of Census indicated that 1519 sheep enterprises existed in this area (4, 5).^{2/} Since these two sets of data differed by less than one percent, it was assumed that the list of names was an accurate representation of the total sheep producing population.

Enumerators were assigned the task of interviewing 260 farmers to collect the data during the winter of 1975. All farms which produced 100 or more head of sheep were included in the survey. Those with less than 100 head of sheep were surveyed on a random sample basis. To estimate the total population of sheep producers, the random sample was expanded by the appropriate multipliers. Because many producers ceased production by 1975, a total population of 910 producers was identified by the enumerators in the twelve county survey. The 1974 Agricultural Census recorded 1,174 producers, a difference of 22.5 percent. Both surveys indicated a decline in number of sheep producers. Producers in the survey reported 82,191 head of sheep on farms. This is less than the 1974 census figure of 92,694 head, a difference of 11.3 percent. The average number of sheep on farms was 90.3 for the twelve county survey and 78.9 for the

^{2/} The population of sheep on farms as reported by the Statistical Reporting Service was divided by the average number of sheep per farm as reported in the 1969 Agricultural Census to estimate number of farms with sheep in 1974.

FIGURE 1. Ohio Counties In Which Sheep Producers Were Surveyed, 1974-75



census report.

The numerical differences were attributed to the timing of the respective surveys and refusals by respondents. Since the twelve counties were surveyed, one and one-half years after the Bureau of Census report, the decrease in number of sheep producers and sheep on farms was consistent with the declining production trend. Some respondents refused to answer questions, even though the enumerator confirmed that sheep were on the farm.

The differences in average numbers of sheep on farms may again reflect differences in the timing of the respective surveys. For example, the Bureau of Census data are normally collected in the fall of the year, the breeding season, while the survey was completed in the winter and spring of the year, the lambing season. The average numbers of sheep per farm reflects lambs and breeding stock for the survey and only breeding stock for the census report.

Marketing Practices

In Southeastern Ohio in 1975, farmers could sell lambs through 14 marketing facilities; twelve of these had a weekly auction and two sponsored occasional lamb pools (1, p. 2). In addition, lambs could be sold to one packer. Lambs sold through auctions are assembled at yards and are sold by an auctioneer to the highest bidder. Lambs sold through pools are assembled into groups of similar grades and are sold by a selling agent to buyers.

At the time of this survey, small size enterprises (farms with 1-199 head of sheep), medium size enterprises (farms with 200-499 head of sheep) and large size enterprises (farms with 500 or more head of sheep) were operating in the 12 county area. Four different sheep commodities: spring or slaughter lambs, feeder lambs, breeding stock and wool were produced by these three enterprises.

In turn, sheep producers were buying two commodities: breeding stock and feeder lambs.^{3/} The remainder of this report analyzes the way these products were marketed by the small, medium and large enterprises.

Marketing of Spring Lambs

Lambing Patterns and Seasonality of Prices

Spring lambing begins in January and terminates during May (Figure 2); 95 percent of all lambs are born in this period, 58 percent are born in February and March. This is true for farmers with both large and small flocks (Table 1). Lambing is concentrated in the winter because ewes are "open" for breeding primarily in the fall of the year and lambs may feed on spring pastures and meadows. Only the younger and slower growing lambs are normally finished on grain (1, page 6).^{4/}

The concentrated lambing season adversely affects the marketing system. Assuming lambs move to market in five to six months, 95 percent of all lambs are marketed between July and November, with the major concentration moving between August and October (Figure 3). The influx of the majority of lambs into the market at one time, of course, increases supply relative to demand. In fact, during this period, demand is decreasing because the spring holiday season is past (a period of increasing demand for lamb products) and the processing and distribution systems are approaching capacity. Because of the glut in the market, prices to farmers decrease. If the lambing season and marketing patterns could be averaged over more months, prices paid to farmers would be less seasonal.

^{3/} Sheep producers buy other inputs including grain, feed additives, medicines, and services. However, the marketing problems associated with these inputs were not investigated.

^{4/} Nutritionists contend that all lambs should be grain fed prior to marketing.

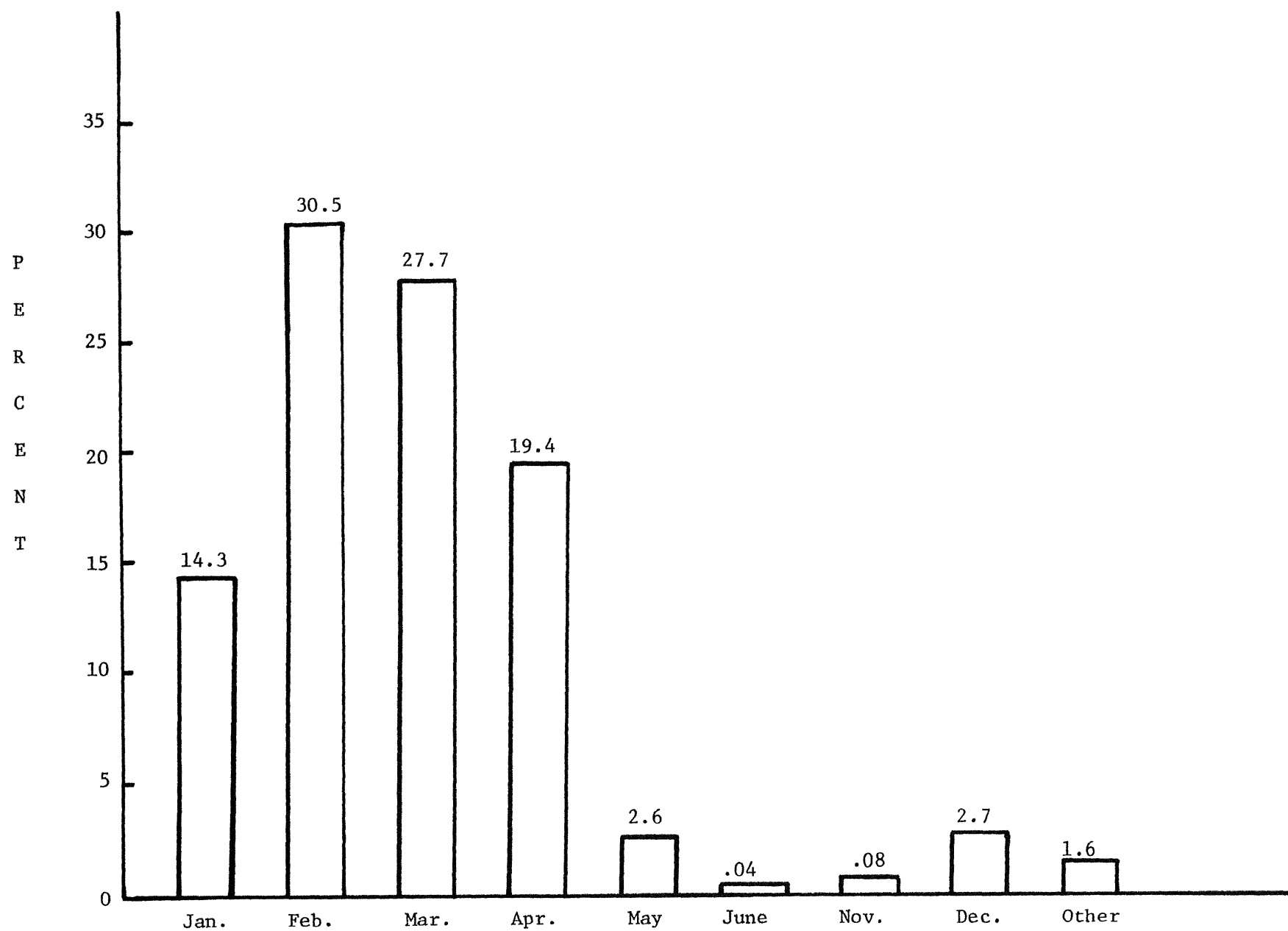


FIGURE 2. Lambing Pattern For 12-County Area in Ohio, 1975

TABLE 1. Seasonal Lambing Patterns As Reported By Farmers
In A 12-County Area in Ohio, 1975

Number of Sheep/Farm		Months								
		Jan.	Feb.	Mar.	Apr.	May	June	Nov.	Dec.	Other
50 ≤ head of sheep	No. of Farms Percent	65 13.1	166 33.5	138 27.9	88 17.8	10 2.0		5 1.0	13 2.6	10 2.0
51-199 head of sheep	No. of Farms Percent	31 12.5	70 28.2	70 28.2	52 21.0	14 5.6	1 0.4		10 4.0	
200-349 head of sheep	No. of Farms Percent	35 24.5	38 26.6	37 25.9	17 11.9		3 2.1	3 2.1	4 2.8	6 4.2
350-499 head of sheep	No. of Farms Percent	10 13.7	20 27.4	20 27.4	23 31.5					
500 + head of sheep	No. of Farms Percent	2 4.5	12 27.3	13 29.5	15 34.1	2 4.5				
Total	No. of Farms Percent	143 14.3	306 30.5	278 27.7	195 19.4	26 2.6	4 0.4	8 0.8	27 2.7	16 1.6

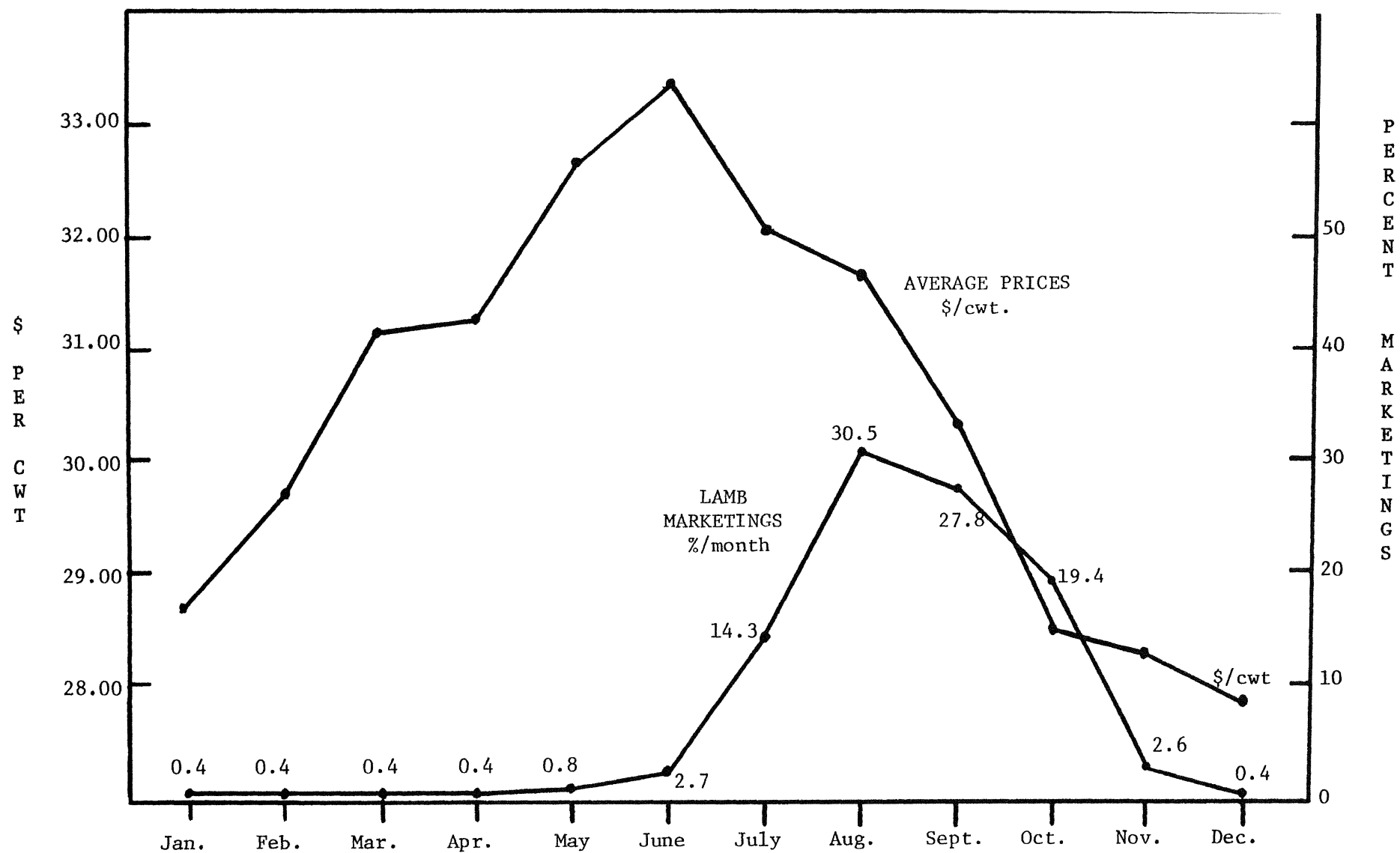


FIGURE 3. Average Monthly Lamb Price Paid to Farmers For a Five Year Period (1971-75) and Percentage of Total Lamb Marketings by Month (1975)

Marketing Outlets for Spring Lambs

To help alleviate price cycles, lamb pools have been a marketing option. In 1975, 17 percent of producers sold lambs through a pool (Table 2). For those who used the pool, nearly 70 percent indicated that lamb pools are very good or adequate; the remainder, 30 percent, were dissatisfied (Table 3). Most non-pool users (78 percent) were unable to evaluate the effectiveness of the pool. Only 10 percent stated that the pool was an inadequate marketing option.

Although lamb producers could sell lambs through 14 markets, most spring lambs moved through one outlet; 559 or 81 percent of all producers sold lambs through one market. Most small and medium size producers sold through one outlet, while 70 percent of the large producers sold through at least two markets. Fifty percent of the large producers used as many as five different markets (Table 4).

In general, some large producers have acquired more marketing knowledge than have the smaller producers. Producers with larger flocks could identify order buyers who bought lambs; 30 percent of the smaller producers did not know the order buyers. Approximately 75 percent of the larger producers could identify the slaughter plant which bought their lambs. Only 41 percent of the smaller producers could identify the slaughter plant. Larger producers conditioned lambs before marketing, sold lambs only after they reached top weight and grade, and sold more than one time per year (Table 4).

Price Competition and Price Information

Based on the number of markets and the number of times many producers sell lambs, it appears on the surface that competition prevails in this region. Since county prices are not available, comparisons with other regions in Ohio cannot be made to support or deny this contention. However, prices paid to farmers in Ohio, as compared with prices in the Virginia teleauction, do not support this

TABLE 2. Importance of Lamb Pooling As Reported By Farms
With Sheep, in a 12-County Area in Ohio, 1975

		Number of Sheep On Farms					Total
		>50	51-199	200-349	350-499	500+	
		Farms Reporting					
Were lambs ever marketed through a lamb pool?	Yes	55	16	31	20	1	123
	No	338	154	47	23	19	581
The effectiveness of lamb pools as evaluated by farm producers.	Very						
	Good	12	4	7	10	1	34
	Adequate	95	20	27	10	10	162
	Poor	35		7			42
	Unknown	92	70	14	3	5	184

TABLE 3. Importance of Lamb Pooling as Reported By Farmers
Using Lamb Pool Outlets in a 12-County Area in Ohio,
1975

Number of Farms Reporting			
Those who use lamb pool.			
			123
Effectiveness of lamb pool as evaluated by producers.	Very		
	Good	15	
	Adequate	71	
	Poor	10	
	Unknown	27	
Those who don't use lamb pool.			
			580
Effectiveness of lamb pool as evaluated by producers.	Very		
	Good	1	
	Adequate	65	
	Poor	63	
	Unknown	452	

TABLE 4. Finished Lamb Marketing Practices By Number of Farms With Sheep in a 12-County Area in Ohio, 1975

		Total Producers -- Sheep By Farms								Total Producers -- Sheep By Farms					
		≥50	51-199	200-349	350-499	500+	Total			≥50	51-199	200-349	350-499	500+	Total
		Farms Reporting								Farms Reporting					
No. of different markets through which lambs were sold.	1	299	150	61	43	6	559	Were lambs sold on a hot carcass basis?	Yes	15	3	0	0	10	28
	2	73	14	7		2	96		No	339	155	62	43	10	609
	3		13	10		2	25								
	5					10	10								
Did same order buyer buy lambs?	Yes	40	13	25	33		111	Were buck lambs discounted at the market?	Yes	88	52	26	10	10	186
	No	200	77	39	10	19	345		No	294	127	52	33	10	516
	Unknown	143	95	16			254								
Do lambs go to same slaughter plant?	Yes	5		14	3		22	Is price information available on a daily basis?	Yes	58	49	27		13	147
	No	152	45	27	10	15	249		No	298	83	8	23	7	419
	Unknown	225	133	37	30	5	430								
Were finished lambs conditioned before marketing?	Yes	70	59	15	30	13	187	Price information on lambs is obtained from:							
	No	286	73	21	13	7	400								
Were lambs marketed at top weight and grade only?								a. Radio		42	23	3			68
								b. Auction Markets		32	18	27		2	79
	Yes	163	128	52	43	15	401	c. Local Newspaper		39	20	8			67
	No	220	40	6		5	271	d. Other Producers							
								e. Television							
								f. Order Buyer				3			3
	Yes	110	7	6			123	g. Ohio News Service		10					10
	No	273	181	92	43	20	609	h. Other		30	30		20	3	83
								i. Combination		15	7	36	13	10	81

contention. For example, in 1970, Ohio prices averaged 60¢/cwt below Virginia. In 1975, Ohio prices averaged \$1.65/cwt below Virginia prices, and in 1976, Ohio prices averaged \$2.45/cwt below Virginia prices.^{5/}

Price information and price signals appear to be inadequate. Nearly 74 percent of all producers indicated that price information is not available on a daily basis. All producers, regardless of size, appear to have difficulty obtaining accurate price information. Most producers obtain price information from radio broadcasts, auction markets, local newspapers, other sources, and a combination of sources. To have a viable efficient sheep industry, accurate, timely price information is required (Table 4).

Marketing of Cull Ewes and Breeding Stock

Most sheep are produced for meat and wool rather than for sale for breeding purposes. Cull ewes were marketed by 1151 producers while 311 producers sold breeding stock (Table 5). Breeding stock includes the production and sale of ewes and rams.

Cull ewes arrive at the market primarily in June and in July, and again in October and November. In fact, nearly 83 percent arrive at the market during these two periods, with 36 percent moving in October. This trend is relatively consistent for all producers regardless of flock size (Table 5).

The June-July marketings occur after the lambing and lactation season. These producers are either reducing flock size or are replenishing the flock with younger ewes. The fall marketings represent the sale of ewes which failed to conceive or represent poor management practices by producers. These producers who neglect to thin the flocks until the pasture and meadow season is over,

^{5/}Local price comparisons Ohio-Virginia 1970:1975 and 1976." Paper presented by Dr. David Holden, Farm Cooperative Service, U.S.D.A. at the Ohio Sheep Improvement Association Meetings, March 26, 1977.

No. of Sheep/ Farm		Jan.	Feb. - May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
CULL EWES										
50≤	No. of Farms		18	77	88	3	15	163	110	40
	Percent		3.5	15.0	17.1	0.6	2.9	31.7	21.4	7.8
51-199	No. of Farms			69	52	13	13	127	7	14
	Percent			23.4	17.6	4.4	4.4	43.1	2.4	4.7
200-349	No. of Farms			35	27	13	3	72	7	28
	Percent			18.9	14.6	7.0	1.6	38.9	3.8	15.1
350-499	No. of Farms			30	10		10	43		20
	Percent			26.5	8.8		8.8	38.1		17.7
500+	No. of Farms			13	10		10	10		1
	Percent			29.5	22.7		22.7	22.7		2.3
Total	No. of Farms		18	224	187	29	51	415	124	103
			3.5	19.5	16.2	2.5	4.4	36.1	10.8	8.9
BREEDING STOCK										
50≤	No. of Farms	57						10	10	
	Percent	74.0						13.0	13.0	
51-199	No. of Farms	50					3		3	
	Percent	89.3					5.4		5.4	
200-349	No. of Farms	9					10	11	14	10
	Percent	16.7					18.5	20.4	25.9	18.5
350-499	No. of Farms				10	10	10	20	10	10
	Percent				16.7	16.7	16.7	33.3	16.7	16.7
500+	No. of Farms	6	6				10	14	14	14
	Percent	9.4	9.3				15.6	21.9	21.9	21.9
Total	No. of Farms	122	6		10	33	55	51	34	
	Percent	39.2	2		3.2	10.6	17.7	16.4	10.9	

receive lower prices for ewes and incur higher costs.

Since prices for ewes are relatively high in the spring and are relatively low in the fall, there is no economic incentive for such a marketing practice. In fact, this adds cost to the operation because of potential diseases and predator problems, death losses, and consumption of grasses and other feeds which could be consumed by other animals, including sheep.

Breeding stock is primarily marketed between September and January (Table 5). In fact, almost 95 percent of all marketings occur during this period, with 39 percent occurring in January. All breeders, regardless of size sold breeding stock during this period (Table 5). These marketings are in conjunction with the breeding season, a time when many special sales for breeding stock are occurring.

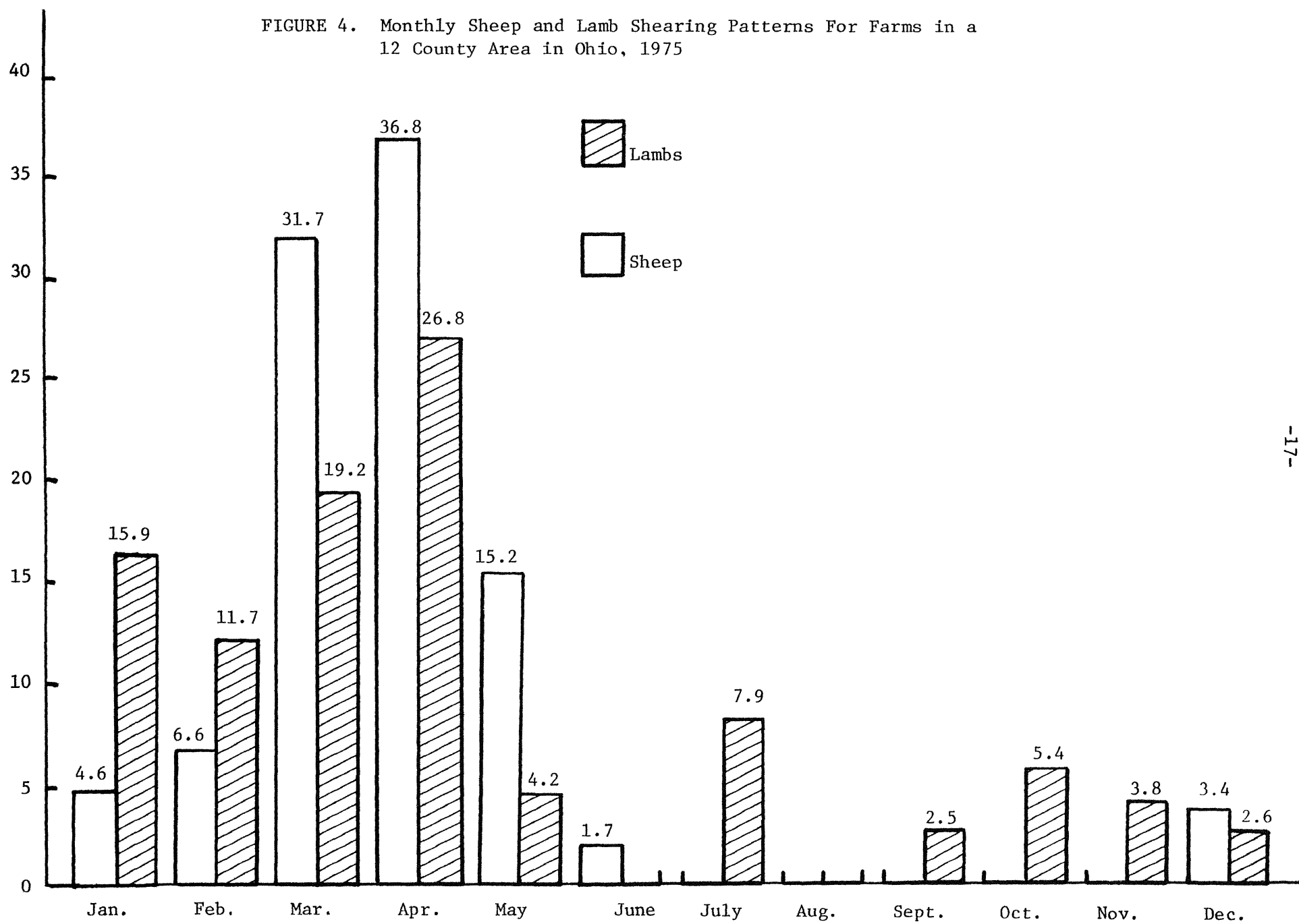
Wool Marketing Practices

Most sheep are sheared during the late winter and early spring, during or after the lambing season (Figure 4). Approximately 84 percent of all producers shear sheep during March, April, and May. Farmers who produce more than 500 head of sheep per farm are shearing in December and January prior to lambing season, while smaller sheep producers are shearing after the lambing season, a practice which adds costs to the operation.

The early shearing management practice reduces costs because a farmer is able to house more ewes per square foot of barn space. Lambing death rates are decreased because lambing and nursing is easier for the ewe and lamb and the ewe will spend more time in the barn. Thus, the lamb is protected from the elements.

In contrast to sheep, lambs are sheared throughout the year. The heaviest concentration occurs during the January to April period. Farmers who produce 500

FIGURE 4. Monthly Sheep and Lamb Shearing Patterns For Farms in a 12 County Area in Ohio, 1975



or more head did not report the shearing of lambs. Smaller producers who shear lambs have non-mature carryovers from the previous year. Some shearing may also occur in late summer or early fall before the lambs move to market (Figure 4).

Most sheep and lambs are sheared by professionals (Table 6). Approximately 68 percent of producers indicated that sheep shearers were not difficult to locate; 99 percent indicated that professional shearers did not insist on buying wool, and most indicated that the professionals did not offer to buy wool. Since professional sheep shearers are willing to sell their services without any pre-conditions for buying wool, the activities of the professionals do not adversely affect the growth of the sheep industry.

Wool Prices

Approximately 37% of all farmers sell wool at shearing time; 41% consign wool and 22% store on the farm (Table 7). All farmers, regardless of size of operation, sold some wool at shearing time. Approximately 1/3 of all producers with less than 500 head consigned wool. Those who produced 500 or more head stored wool on their farms.

Prices paid for wool are relatively constant throughout the year, with a modest decrease in May (Figure 5). Price stability exists because an abnormally large supply of wool is not being delivered to the market at any one time. Because of the price stability, producers gave a random response to the question: Which marketing method increases wool prices? (Table 6).

TABLE 6. Wool Shearing Practices and Opinions as Reported
By Farms With Sheep in a 12-County Area in Ohio, 1975

		Total Number of Sheep on Farms, 1974					Total
		≥50	51-199	200-349	350-499	500+	
		Farms Reporting					
Are shearers difficult to find?	No	251	113	43	43	20	470
	Yes	128	62	36	0	0	226
Who shears the sheep?	Farmer	90	44	34	30	3	201
	Professional	233	119	34	3	12	401
Do professional shearers insist on buying wool?	No	379	171	79	33	20	682
	Yes	3	7	0	0	0	10
Do professional shearers offer to buy wool?	No	303	143	57	40	20	563
	Yes	80	36	22	3	0	141

TABLE 7. Wool Marketing Practices and Opinions As
Reported By Farmers With Sheep in a 12-County
Area in Ohio, 1975

Practices or Opinions		Total Number of Sheep on Farms, 1974					Total
		≥50	51-199	200-349	350-499	500+	
		Farms Reporting					
Was wool con- signed to Ohio Wool Growers Association?	No	251	70	10	30	15	376
	Yes	151	84	10	10		255
Was wool ever consigned to Ohio Wool Growers Association?	No	232	84	10	20	10	356
	Yes	19	33		10		62
Was wool ever marketed through any other pool?	No	389	135	20	20	15	579
	Yes	10	19				29
Is there an Ohio Wool Growers buying point near you?	No	169	34	10	20	15	248
	Yes	233	120	10	20		383
Are wool prices in- creased if sold through the following markets?	Cash	90	34		20		144
	Pooled	133	64		10		207
	Don't Know	104	19	20	10	15	168
Does grading increase the price of wool?	No	171	29	10	10	5	225
	Yes	176	113	10	10		309
	Don't Know	55	14		20		89
Wool is stored on farms for future sale.	No	321	123	44	40	1	529
	Yes	61	48	26	3	14	152
Are marketing outlets adequate to insure competition?	Very Good	40	37	10	10	2	99
	Adequate	128	89	35	13	11	276
	Poor	100	60	21	10	2	193

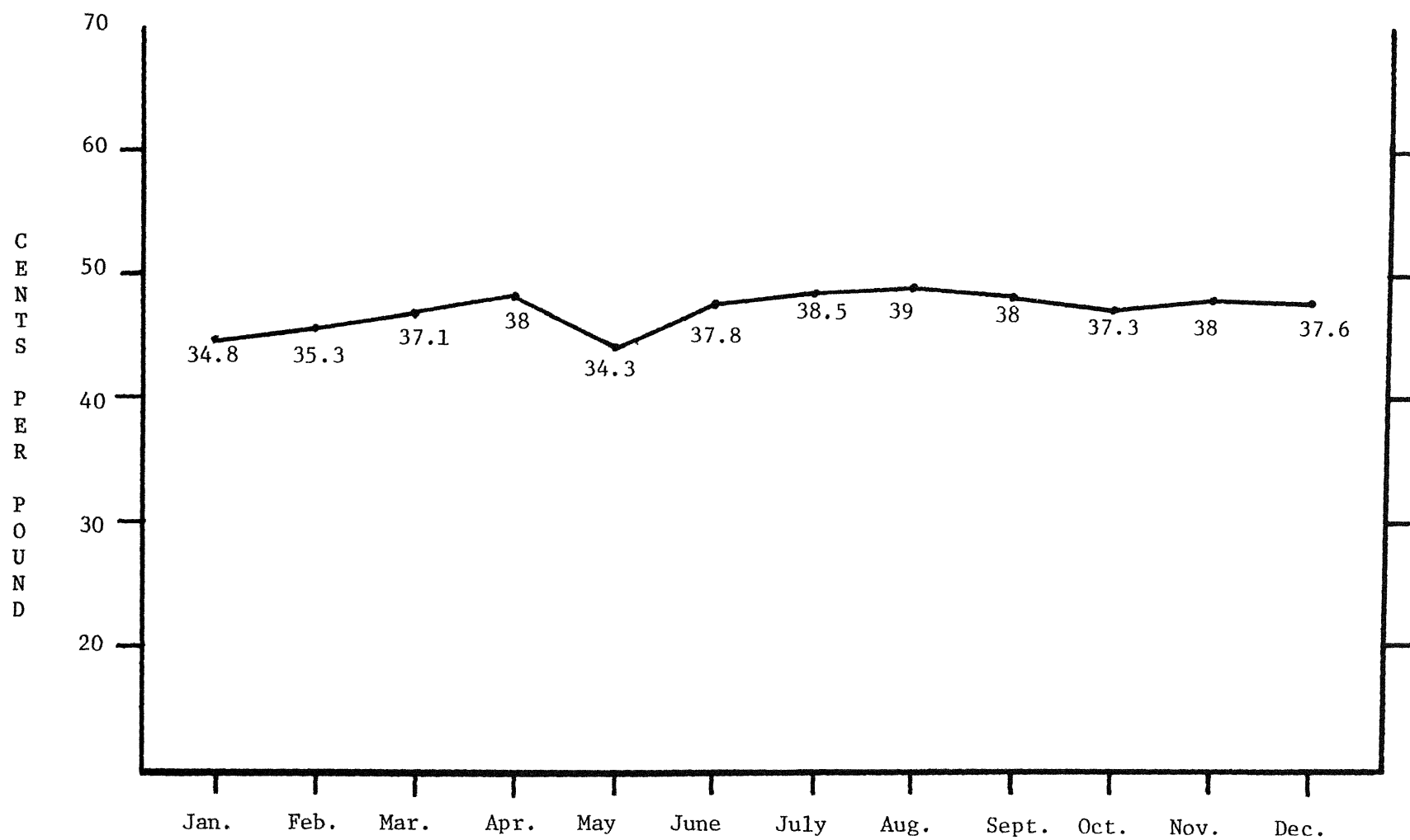


FIGURE 5. Average Prices Paid to Farmers for Wool: Ohio (1972-1976 Average)

Acquisition of Breeding Stock and
Feeder Lambs by Producers

In this twelve county area, breeding stock was acquired by 10 percent of all respondents; 90 percent of the producers raised their own breeding stock (Table 8).^{6/} Slightly over six percent of all producers acquired stock from the Southwest and Southeast, and less than 4 percent of all producers acquired breeding stock from auctions and other producers.

Breeding stock was bought during the last six months of the year. The heaviest concentrations occurred prior to the breeding season; this pattern is relatively similar for all categories of producers (Table 9).

Most producers (87 percent) did not purchase feeder lambs in 1974. Producers with larger flocks were more active in this market than were smaller producers (Table 10). Most lambs were purchased in the fall through organized markets. Only small numbers of lambs were purchased directly from other farmers (Table 10).

A large number of producers did not market breeding stock or feeder lambs in the survey area. Most sheep producers are self-contained in that they produce their own breeding stock and market lambs. To achieve growth in sheep numbers in this region, farmers who want to enter production or want to expand production must acquire breeding stock and/or feeder lambs from outside the area.

Production Plans and Responses to Price Change

At the time of this survey, most producers (87 percent) said that they did not intend to increase sheep production in 1975. This response was nearly

^{6/} It was assumed that a no answer in Table 8 represented farm acquisition of sheep. This was the only set of questions with large numbers of non-responses.

TABLE 8. Methods For Acquiring Breeding Stock As Reported By Farms
With Sheep in a 12-County Area in Ohio, 1975

Total No. of Sheep on Farms		No Answer	Auction	Buyer	Other Producer	Own Farm	Proven Sire	Other	Combi- nation	Total
≥50	No. Farms	259	10			107		3	3	382
	Percent	67.8	2.6			28.0		0.8	0.8	54.3
51-199	No. Farms	92	9			52		28	3	184
	Percent	50.0	4.9			28.3		15.2	1.6	26.2
200-349	No. Farms	24	4			48		3		79
	Percent	30.4	5.1			61.0		3.8		1.1
350-499	No. Farms	30			3	10				43
	Percent	69.8			7.0	23.3				6.1
500+	No. Farms	4				1		10		15
	Percent	26.7				6.7		66.7		2.1
Total	No. Farms	409	23		3	218		44	6	703
	Percent	58.2	3.3		0.4	31.0		6.3	0.9	100.0

TABLE 9. Seasonal Purchasing Patterns For Feeder Lambs, Replacement EWES, and
Breeding Rams As Reported By Farms With Sheep in a 12-County Area in Ohio, 1975

Total No. of Sheep on Farms		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
LAMBS														
≥50	No. Farms									10	10			20
	Percent									50.0	50.0			14.5
51-199	No. Farms								3		3			6
	Percent								50.0		50.0			4.3
200-349	No. Farms													0
	Percent													0
350-499	No. Farms							10	10	20	10	10	10	70
	Percent							14.3	14.3	28.6	14.3	14.3	14.3	50.7
500+	No. Farms								10	10	10	10	2	42
	Percent								23.8	23.8	23.8	23.8	4.8	30.4
Total	No. Farms							10	23	40	33	20	12	138
	Percent							7.2	16.7	29.0	23.9	14.5	8.7	100.0
EWES														
≥50	No. Farms													0
	Percent													0
51-199	No. Farms				7	3	8	7						25
	Percent				28.0	12.0	32.0	28.0						65.8
200-349	No. Farms						7			3	3			13
	Percent						53.0			23.0	23.0			34.2
350-499	No. Farms													0
	Percent													0
500+	No. Farms													0
	Percent													0
Total	No. Farms				7	3	15	7	3	3				38
	Percent				18.4	7.9	39.5	18.4	7.9	7.9				100.0

TABLE 9. (con'd)

Total No. of Sheep on Farms		Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
		RAMS												
≥50	No. Farms					15	18	23	20	13	17	10		116
	Percent					12.9	15.5	19.8	17.2	11.2	14.7	8.6		40.4
51-199	No. Farms					18	23	25		13	7	7		93
	Percent					19.4	24.7	26.9		14.0	7.5	7.5		32.4
200-349	No. Farms				11	7	10	16	10	10	4			68
	Percent				16.2	10.3	14.71	23.5	14.71	14.71	5.9			23.7
350-499	No. Farms								10					10
	Percent								100.0					3.5
500+	No. Farms													0
	Percent													0
Total	No. Farms				11	40	51	64	40	36	28	17		287
	Percent				3.8	13.9	17.8	22.3	13.9	12.5	9.8	5.9		100.0

TABLE 10. Methods For Purchasing Feeder Lambs As Reported By Farms
With Sheep in a 12-County Area in Ohio, 1975

Total No. of Sheep on Farms		No Answer	Organized Markets (1)	Producers (2)	Order Buyers (3)	Other (4)	(1)-(4)	Total
≥50	No. Farms	342	30	10				382
	Percent	89.5	7.9	2.6				54.6
51-199	No. Farms	174	3					177
	Percent	98.3	1.7					25.3
200-349	No. Farms	64	4				10	78
	Percent	82.1	5.1				12.8	11.1
350-499	No. Farms	23	10				10	43
	Percent	53.5	23.3				23.3	6.1
500+	No. Farms	6	14					20
	Percent	30.0	70.0					2.9
Total	No. Farms	609	61	10	0	0	20	700
	Percent	87.0	8.7	1.4			2.9	100.0

unanimous for all categories of producers. These producers were also nearly unanimous in response to price change. Approximately 64 percent stated that they would not change flock sizes even though wool or lamb prices were increasing; 22 percent indicated that they would increase flock size if wool prices increase; and 28 percent indicated that flock size would decrease even though wool prices were increasing (Table 11).

Similar responses were also set forth for changes in lamb prices. Approximately 64 percent were indifferent to changes in prices of lambs; 28 percent indicated that flock size would increase with increases in lamb prices; and 8 percent indicated that flock sizes would decrease even though lamb prices were increasing.

Conclusions and Implications

The lambing season is concentrated into a two to four month period, commencing in January. Slaughter lambs in turn are sold in the fall of the year, normally within a two to four month period. The concentration of lambs moving to market is countercyclical to price movements. Thus, many producers market lambs during the season in which prices are low.

Because ewes are open for breeding primarily in the fall of the year, it is impossible for the farmer to completely alter the lambing season. Only changes in genetics or the introduction of drugs such as estrogen could totally alter the lambing and thus the marketing patterns. However, farmers could extend the marketing period in several ways by (1) selecting breeding stock which produces rapidly growing lambs, (2) having ewes lamb as soon as possible, (3) feeding concentrates, and (4) marketing lambs more than one time per year, as they reach their top weight and grade. These changes could move lambs to

TABLE 11. Production Plans and Impact of Prices on Flock Size As Reported
By Farm With Sheep in a 12-County Area in Ohio, 1975

Production Plans		Total Number of Sheep on Farms, 1974					Total
		≥50	51-199	200-349	350-499	500+	
Will sheep numbers be increased?				Farms Reporting			
	No	332	142	71	43	20	608
	Yes	50	36	8			94
If price of wool increases, will you:							
a)	increase	78	36	9			123
b)	decrease	54	3	17			74
c)	keep flock same size	135	124	51	33	13	356
If price of lamb increases, will you:							
a)	increase	103	56	9			168
b)	decrease	28	3	17			48
c)	keep flock same size	158	123	55	33	15	384

market as early as the last of April, resulting in a seven month marketing season. A continuous flow of lambs to market would, in turn, dampen the seasonal price cycle, decreasing prices in the spring and increasing prices in the fall. Because of the spring holiday demand, producers who market in the spring could expect relatively higher prices than those who marketed in the fall.

Based on the number of markets, price competition could prevail in the region. A more thorough examination of data reveals, however, that prices within the 12 county area averaged \$2.45/cwt under the price paid to farmers selling in the Virginia teleauction in 1976. The price spread may reflect quality differences, supply flow pattern differences on inadequate competition among buyers in the Ohio market.

Producers market cull ewes, breeding stock, and wool as well as slaughter lambs. Cull ewes are marketed in the spring and in the fall of the year. Producers who neglect to thin flocks after the lambing and lactation season, in the spring of the year, receive a lower price for their ewes and are adding to the cost of production. Costs increase because disease and predator problems are enhanced, the potential for death losses are increased, and the consumption of roughages and concentrates increases.

At this time, very few farmers are selling or buying breeding stock. Most of the breeding stock is marketed during or prior to the breeding season. This is in conjunction with the advent of special sales which are conducted by the different breeding associations. If sheep production begins to increase in Ohio, some producers may be able to market lambs and rams for breeding purposes. To be successful, these animals must produce offspring which will gain rapidly and efficiently and go to the market in a short period of time.

Wool prices are relatively stable, reflecting the even distribution of supply and demand for this product. Most farmers shear sheep after lambing season commences. This practice adds costs to the operation because infectious diseases and death losses increase for lambs. In addition, more barn space is needed for the ewes.

Currently, wool may be stored on the farm, sold through cash markets, or sold through consignments to pools. At this time, the larger producers are storing and selling wool on the cash markets. The very small producers are selling on the cash market at shearing time and the medium size producers are consigning wool. It appears that the larger producers may be able to acquire the same marketing advantages by selling wool by themselves. Small producers may sell such a small amount of wool that the additional marketing costs that may be associated with the consignment effort do not cover the additional returns. In addition, the smaller producer is often unaware of the advantages and disadvantages of the pooling method.

The sheep industry in Southeastern Ohio is vertically integrated. A producer provides most of his breeding stock, produces lambs and wools, feeds the lambs to slaughter weight, and sells both lambs and wool through a market. Specialized breeding stock and feeder lamb markets have not developed. Whether this integration is a consequence or a cause of the decline in the sheep industry is not documented in this analysis. However, the inability to specialize in one production stage may be limiting growth in the sheep industry. Ironically, the cattle and hog industries, which are relatively prosperous, are substantially more specialized. Feeder pig and feeder cattle markets abound.

In this twelve county area, producers were not planning to expand sheep production. In fact, most were not planning expansion even if the lamb or wool prices increased. Obviously, the existing producers are electing to not heed

increasing price signals that may be transmitted through the marketing system. If the sheep industry is to grow, price information must become more timely, and further educational efforts relating to good production and marketing practices must be adopted. Specifically, an educational effort is needed to help producers assess the advantages and disadvantages of the different marketing alternatives including auctions, pools, and teleauctions. Information is needed to define the appropriate time and place to market cull ewes and breeding stock.

Producers must be aware of the advantages and disadvantages of sheep shearing prior to lambing and a research effort should be launched to better understand the existing structure of the industry. By enhancing the educational effort, by introducing new marketing systems, and by introducing more specialization within the industry, growth may once again occur in the sheep industry in southeastern Ohio.

FOOTNOTES

1. Cooper, Ivan. Appalachia Sheep Marketing Study, ARL Contract 74-231, The Ohio Farm Bureau Federation, December, 1977.
2. Holder, David L. Marketing Alternatives For Sheep and Lamb Producers, Preliminary Report 17, Farmers Cooperative Service, U. S. Department of Agriculture, March, 1977.
3. The Ohio Farm Bureau Federation, Appalachian Sheep Industry Demonstration Project Report, ARL Contract No. 73-431 RPC. 274, 1973.
4. United States Department of Commerce, The 1969 and 1974 Agricultural Census Reports.
5. United States Department of Agriculture, Ohio Agricultural Statistics, 1975, Columbus, Ohio.